

**Listing of Claims:**

1. (Currently Amended) A defective pixel detector adapted to detect a defective pixel contained in pixel data produced ~~out~~ ~~of~~ by a solid-state imaging device, ~~characterized by said~~ defective pixel detector comprising:

5        ~~a~~ normal pixel detection means for detecting ~~out~~ a ~~normal~~ pixel to be factored out from ~~said~~ among a plurality of pixels of the pixel data based on a pixel to be inspected and a neighboring pixel around the pixel to be inspected, and for factoring out the detected pixel; and

10        ~~a~~ defective pixel detection means for detecting a defective pixel out of remaining pixels from among the plurality of pixels that are not factored out by said normal pixel detection means.

2. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 1, ~~characterized in that~~ wherein said normal pixel detection means comprises ~~a~~ level difference calculation means ~~adapted to calculate~~ for calculating a level difference  
5        between the pixel to be inspected and ~~an~~ the neighboring pixel, and ~~a~~ comparison means ~~adapted to compare~~ for comparing said level difference with a first threshold, so that when said level difference is less than said first threshold, the pixel to be inspected is determined ~~as normal~~ to be factored out.

3. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 1, ~~characterized in that wherein~~ said normal pixel detection means comprises ~~a~~ level difference calculation means ~~adapted to calculate~~ for calculating level differences between the pixel to be inspected and a plurality of neighboring pixels, ~~a~~ comparison means ~~adapted to compare~~ for comparing each of said plurality of level differences calculated ~~at~~ by said level difference calculation means with a first threshold, and a determination block adapted to calculate ~~the~~ a number of neighboring pixels at which said level difference is less than said first threshold, and to compare the number of neighboring pixels calculated by said calculation with a second threshold, so that when said number of neighboring pixels is greater than said second threshold, the pixel to be inspected is determined ~~as~~ normal to be factored out.

4. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 1, ~~characterized in that wherein~~ said normal pixel detection means ~~has~~ comprises a memory ~~for holding which holds~~ the pixel to be inspected, and which also ~~works~~ operates as a memory ~~of~~ for said defective pixel detection means.

5. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 1, ~~characterized in that wherein~~ said defective

pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined  
5 ~~at~~ by said normal pixel detection means ~~as normal~~ to be factored out.

6. (Currently Amended) A defective pixel detection ~~process method~~ , characterized by comprising the steps of:

~~detecting a normal pixel out of~~ holding in a memory a pixel to be inspected and a neighboring pixel around the pixel to be  
5 inspected from among a plurality of pixels of pixel data produced out of by a solid-state imaging device,

detecting a pixel to be factored out based on the pixel to be inspected and the neighboring pixel;

factoring out said detected ~~normal~~ pixel, and

10 detecting a defective pixel out of remaining pixels from which ~~said normal pixel has~~ among the plurality of pixels that have not been factored out.

7. (Currently Amended) ~~A~~ The defective pixel detection ~~process method~~ as recited in claim 6, ~~characterized in that at the step of wherein when~~ detecting said ~~normal~~ pixel to be factored out, a level difference between the pixel to be  
5 inspected and ~~a~~ the neighboring pixel is calculated, and the calculated level difference ~~calculated by said calculation~~ is

compared with a first threshold, so that the pixel to be inspected is determined ~~as normal~~ to be factored out when ~~, as a result of said comparison,~~ the calculated level difference is less than the first threshold.

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8. (Currently Amended) ~~A~~ The defective pixel detection ~~process method~~ as recited in claim 6, ~~characterized in that at the step of wherein when~~ detecting said ~~normal~~ pixel to be factored out, level differences between the pixel to be inspected and a plurality of neighboring pixels are calculated, ~~;~~ ~~said plurality of the calculated~~ level differences ~~found by said calculation~~ are each compared with a first threshold, ~~;~~ ~~from results of said comparisons,~~ the a number of neighboring pixels at which said level differences are less than said first threshold is calculated, [[;]] and the number of neighboring pixels found by said calculation is compared with a second threshold, so that when said number of neighboring pixels is greater than said second threshold, the pixel to be inspected is determined ~~as normal~~ to be factored out.

9. (Currently Amended) An imaging system ~~comprising~~ having a defective pixel detector adapted to detect a defective pixel contained in pixel data produced ~~out of~~ by a solid-state imaging

device, ~~characterized in that~~ wherein said defective pixel  
5 detector comprises:

~~a~~ normal pixel detection means for detecting ~~out~~ a ~~normal~~  
pixel to be factored out from ~~said~~ among a plurality of pixels of  
the pixel data based on a pixel to be inspected and a neighboring  
pixel around the pixel to be inspected, and for factoring out the  
10 detected pixel; and

~~a~~ defective pixel detection means for detecting a defective  
pixel out of remaining pixels from among the plurality of pixels  
that are not factored out by said normal pixel detection means.

10. (Currently Amended) ~~An~~ The imaging system as recited in  
claim 9, ~~characterized in that~~ wherein said normal pixel  
detection means comprises ~~a~~ level difference calculation means  
~~adapted to calculate~~ for calculating a level difference between  
5 the pixel to be inspected and ~~an~~ the neighboring pixel, and ~~a~~  
comparison means ~~adapted to compare~~ for comparing said level  
difference with a first threshold, so that when said level  
difference is less than said first threshold, the pixel to be  
inspected is determined ~~as normal~~ to be factored out.

11. (Currently Amended) ~~An~~ The imaging system as recited in  
claim 9, ~~characterized in that~~ wherein said normal pixel  
detection means comprises ~~a~~ level difference calculation means

~~adapted to calculate~~ for calculating level differences between  
5 the pixel to be inspected and a plurality of neighboring pixels,  
~~a comparison means adapted to compare~~ for comparing each of said  
plurality of level differences calculated ~~at~~ by said level  
difference calculation means with a first threshold, and a  
determination block adapted to ~~use the result of comparison at~~ by  
10 ~~said comparison means to calculate the~~ a number of neighboring  
pixels at which said level difference is less than said first  
threshold, and to compare the number of neighboring pixels  
calculated by said calculation with a second threshold, so that  
when said number of neighboring pixels at which the said level  
15 difference is less than said first threshold is greater than said  
second threshold, the pixel to be inspected is determined ~~as~~  
~~normal~~ to be factored out.

12. (Currently Amended) ~~A~~ The defective pixel detector as  
recited in claim 2, ~~characterized in that wherein~~ said normal  
pixel detection means ~~has~~ comprises a memory ~~for holding which~~  
holds the pixel to be inspected, and which also ~~works~~ operates as  
5 a memory ~~of~~ for said defective pixel detection means.

13. (Currently Amended) ~~A~~ The defective pixel detector as  
recited in claim 12, ~~characterized in that wherein~~ said defective  
pixel detection means advances to a low power consumption mode

with clocks stopped when the pixel to be inspected is determined  
5 ~~at by~~ said normal pixel detection means ~~as normal~~ to be factored  
out.

14. (Currently Amended) ~~A~~ The defective pixel detector as  
recited in claim 3, ~~characterized in that wherein~~ said normal  
pixel detection means ~~has~~ comprises a memory ~~for holding which~~  
holds the pixel to be inspected, and which also ~~works~~ operates as  
5 a memory ~~of~~ for said defective pixel detection means.

15. (Currently Amended) ~~A~~ The defective pixel detector as  
recited in claim 14, ~~characterized in that wherein~~ said defective  
pixel detection means advances to a low power consumption mode  
with clocks stopped when the pixel to be inspected is determined  
5 ~~at by~~ said normal pixel detection means ~~as normal~~ to be factored  
out.

16. (Currently Amended) ~~A~~ The defective pixel detector as  
recited in claim 2, ~~characterized in that wherein~~ said defective  
pixel detection means advances to a low power consumption mode  
with clocks stopped when the pixel to be inspected is determined  
5 ~~at by~~ said normal pixel detection means ~~as normal~~ to be factored  
out.

17. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 3, ~~characterized in that wherein~~ said defective pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined  
5 ~~at by~~ said normal pixel detection means ~~as normal~~ to be factored out.

18. (Currently Amended) ~~A~~ The defective pixel detector as recited in claim 4, ~~characterized in that wherein~~ said defective pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined  
5 ~~at by~~ said normal pixel detection means ~~as normal~~ to be factored out.

19. (New) A defective pixel detector as recited in claim 1, wherein said pixel to be factored out is a normal pixel.

20. (New) A defective pixel detection method as recited in claim 6, wherein said pixel to be factored out is a normal pixel.

21. (New) A defective pixel detector as recited in claim 9, wherein said pixel to be factored out is a normal pixel.